Inflammatory Skin Conditions: Acne Vulgaris

- This is when the pilosebaceous follicles become inflamed
- Generally a hormonal thing (caused by androgens), therefore it happens mostly in teenagers.
- Contributing factors include increased sebum production, abnormal follicular keratinization, bacterial colonization (of propionibacterium acnei) and inflammation

Presentation:
- Commonly affects the face, chest and upper back
- Lesions can have none-inflammatory bases (there will be ‘open comedones which are blackheads’) and ‘closed comedones which are whiteheads’
- In severe cases, will have inflammatory bases (pustules, papules, nodules and cysts)

Management:
- Topical therapies: these are used for mild acne and include benzoyl peroxide, topical antibiotics (these have antibacterial properties), and topical retinoids (both comedolytic and anti-inflammatory properties)
- Oral therapies: these are used for moderate to severe acne and include oral antibiotics (e.g. tetracycline), anti-androgens (the CYPs such as Cyproterone) for females, and oral retinoids (Isotretinoin)
- Treatment needs to be long-term (at least 6 months)

Inflammatory Skin Conditions: Psoriasis

- It is a chronic inflammatory disorder characterized by hyperplasia of the epidermis and infiltration by inflammatory cells
- The exact cause is unknown, but various factors such as genetics, immune system abnormalities, and environmental factors are thought to play a role
- The disease is thought to be triggered by a breakdown in the skin barrier, leading to an overgrowth of skin cells

Presentation:
- Plaque Psoriasis: thick, raised, red patches covered with silver-white scales

Inflammatory Skin Conditions: Atopic Eczema

- Sometimes the more common term ‘eczema’ is used to describe it
- There is an abnormality in the epidermis caused by the skin barrier
- Often associated with a family and personal history of allergies
- Common allergies include food, animals, household contact, and airborne substances
- Management:
  - Emollient: for relief of itching
  - Topical steroids
  - Antihistamines: for relief of itching

Skin Infections: Bacterial infections

- When there is a spreading bacterial infection of this skin, you get one of two different phenomena:
  - Cellulitis: this is when deep subcutaneous tissue is involved
  - Erysipelas: this is a more superficial infection of the dermal and superficial subcutaneous tissue

- The two main groups causing bacterial infections are Staphylococcus and Staph Aureus. There are certain risk factors such as immunosuppression, wounds, cutaneous ulcers, tissue damage (e.g. burns), and any minor skin injury

Presentation:
- It is most commonly in the lower limbs
- There will be redness, swelling, warmth, and pain
- Sometimes there is associated lymphangitis
- The person can be systemically unwell with fever, rigor, and rigors (especially in the case of erysipelas)

Management:
- Antibiotics (e.g. Cefuroxim, Augmentin)
- General supportive care such as rest, leg elevation, steroids, and analgesics
- Note that serious complications such as necrosis, abscess formation and septicaemia can develop
Skin Infections: Staphylococcal Scalded Skin Syndrome
- Commonly seen in infancy and early childhood.
- Due to the production of a circulating epidermolytic toxin from coagulase-positive (beta-hemolysin-resistant) Staphylococcus.
- Presentation:
  - Development can be over hours or days.
  - May be particularly bad over the face, neck, elbows, and groin, and can be quite localized as well as diffuse.
  - It starts off as a sandpaper appearance, then progresses to large, flaccid bullae.
  - There will typically be pruritic vesicles.
  - There is intertrigermal blistering.
  - The lesions will be very painful.
  - Recovery is within about 5-7 days.
- Management:
  - Analgesia
  - Antibiotics (e.g., penicillinase-resistant penicillin, fusidic acid, erythromycin or a cephalosporin).

Skin Infections: Viral Infections
- See Sexual Health documents for more information about these infections in the genital area.
- HPV: Human Papilloma Virus
  - A type of virus that causes warts.
  - Usually transmitted via skin-to-skin contact, although indirect transmission may occur via contaminated objects.
- Herpes Simplex Virus
  - A virus spread through infected saliva and is most commonly associated with oral-facial lesions.
  - In healthy patients, the infection is self-limited and treatment is often just symptomatic (with acyclovir).
- Retroviruses (e.g., HIV, HTLV-1)
  - Acute, relentless, and self-limiting caused by the V2 receptor.
  - There may be a syndrome of pruritus, dysaesthesia and pain along the involved dermatome's distribution.
  - There will be grouped macules and papules that then evolve into vesicles which form pusules and crusts.
  - Skin attacks (not required symptomatic treatment, however you can use calamine lotion or antibiotic ointment if you feel the lesion will become infected).

Chronic Leg Ulcers
- Venous ulcer:
  - Painless, particularly on standing.
  - It can cause thick, brown varicose veins and an ulcerate lower leg.
  - Need to have the vascular area (medically assessed).
- Arterial ulcer:
  - Presents particularly at night and when legs are elevated.
  - Will cause aching and cramping pain, and an ulcerated lower leg.
- Mixed ulcer:
  - Presents with raised scars and wounds, and an ulcerated lower leg.
- Associated with access, leg amputation, and venous ulcers.
- Venous ulcer: foot and leg treatment.
- Venous ulcer: treatment includes preventing the ulcer from returning.
- Nutritional ulcers:
  - Often painful/edematous sensation.
  - Vascular insufficiency of the lower limb.
  - Tend to have pressure sores.
- Subcutaneous ulcers:
  - Circumscribed, often with a granulating base, and may be covered by a granulating factor which is unusual.
  - It is a neurovascular ulcer. It may be caused by blunt trauma that characteristically penetrates the subcutaneous fat.
  - Management is wound assessment, regular monitoring, and Excellent care.

ERYTHEMA AB HUS
- Overexposure to infrared radiation typically elderly woman sitting next to open fire.
- Hypertension patches with hyperpigmentation + telangiectasia.
- Risk of squamous cell carcinoma incites not dealt with.